

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s):	Paul E. Share, et al.	Customer No.	62127
Appln. No.:	10/777,299	Confirmation No.	5310
Filed:	February 12, 2004	Group Art Unit:	1791
Title:	Container Having Barrier Properties and Method of Manufacturing the Same	Examiner:	Matthew J. Daniels
		Docket No.:	06-1694-0101

**DECLARATION UNDER 37 CFR 1.132**

I, Dr. Paul E. Share, do hereby declare that:

1. I have a Ph.D in Chemistry from The University of California, Berkeley. I am a Research Scientist at the Valspar Corporation with over 10 years experience in synthesizing, formulating and testing oxygen-scavenging compositions and packaging articles formed therefrom. I am a named inventor on numerous patents and patent applications directed to oxygen-scavenging compositions for packaging end uses.

2. I am a named inventor in the above-stated patent application.

3. I have carefully read U.S. 5,759,653 by Collette et al. ("Collette"). I am familiar with the prosecution of the present application and have read the Office Action mailed on July 22, 2009 (hereinafter the "Office Action").

4. The Office Action asserts that Collette discloses a container that is stable during unfilled storage and has an oxygen-scavenging layer that is activated after the container is filled with product.

5. Based on my careful review of the Collette reference, I am of the opinion that Collette discloses a plastic container having an oxygen-scavenger layer that is activated before it is filled with product. The Collette reference itself teaches that activation inherently occurs prior to filling.<sup>1</sup> Collette apparently desired accelerated activation prior to product filling to avoid the costly aging processes required to achieve activation for certain conventional

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<sup>1</sup> Notably, Collette at col. 6, lines 50-54 states that "[p]rior to activation, the focus will mainly be on keeping the product from becoming activated. After activation, the focus is on filling the package while the package still retains a high percentage of its oxygen scavenging power." See also, e.g., col. 3, lines 58-64; col. 7, lines 24-28; col. 4, lines 22-31; col. 8, lines 57-62; and claim 19.

oxygen barrier systems that are detailed by Collette in the Background Section.<sup>2</sup> Because the Collette oxygen scavenger layer is activated before filling, Collette teaches that measures (e.g., refrigeration, desiccation, storage under a modified atmosphere, and/or use of EVOH shielding layers) must be taken to delay depletion of the already-activated scavenging layer prior to use.<sup>3</sup>

6. The Office Action at pages 3, 6, and 8 cites portions of Collette (7:24-33, 7:59-63, and 8:46-51) as disclosing a plastic container having a barrier layer with an oxygen scavenging property that is activated after the container is filled with an aqueous fluid. A subset of these passages (specifically, 7:32 and 7:61) is also cited by the Office Action in support of the assertion that Collette teaches forming hot-fill containers that include heat-activated catalysts which would activate during product filling. When read in context of the document as a whole, the aforementioned passages do not support the assertion that Collette discloses a method for producing a plastic container having an oxygen scavenging layer that is activated after product filling. Each of the cited passages are addressed in order below:

- 7:24-28: This passage describes that the unfilled containers of Collette will have a definite shelf life in terms of scavenging capacity and describes measures (e.g., storage under a modified atmosphere, refrigeration, desiccation, etc.) for extending the shelf life of the container. It is my professional opinion that these measures only delay depletion of the already-activated scavenging layer prior to use. The disclosure at 7:24-28 is consistent with a container having a scavenger layer that is not stable during unfilled storage and is inherently activated before filling.
- 7:29-33: This passage generically states that “additional care” is required for catalysts that are activated at room temperature in an oxygenated environment, without explaining at which stage of production the additional care is required. Based on the disclosure preceding this passage at 6:55-7:16, it is my opinion that the additional care is related to the handling of the catalyst feedstock and/or the catalyst-containing masterbatch prior to formation of the first blend (which is ultimately used to form the scavenger layer).
- 7:59-63: This passage describes the “hot fill” bottle shown in Figs. 6 and 7. Hot-fill bottles are a type of container used in the packaging industry to accommodate packaging of food or beverage products having an elevated temperature. It is

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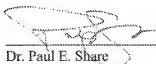
<sup>2</sup> See, e.g., col. 1, lines 57-60 and col. 2, lines 13-21.

<sup>3</sup> See, e.g., col. 7, lines 24-28.

irrelevant whether the containers of Collette are "hot-fill" since the barrier layer of the Collette container is already activated prior to product filling. Whether the catalyst of the Collette barrier layer is activated by heat or water is also irrelevant since there is no disclosure in Collette of any method for forming a container having a barrier layer that is not activated prior to filling.

- 8:46-51: When read in its full context (i.e., 8:46-9:10), this passage refers to a container having an oxygen-scavenging layer that is activated before filling. Based on the disclosure at 8:57-62, it is clear that the EVOH shielding layers are used to prevent oxygen from reaching the already-activated scavenger layer during unfilled storage, thereby preventing depletion of the scavenging capacity of the activated scavenging layer prior to filling. Upon filling, the oxygen barrier properties of the inner EVOH shielding layer decreases, thereby allowing oxygen entrapped in the filled container to permeate through the inner EVOH layer and reach the already-activated scavenging layer.<sup>4</sup>

7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Dr. Paul E. Share

10/20/2009

Date

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<sup>4</sup> See, e.g., col. 9, lines 2-8.